

UNITED STATES DEPARTMENT OF AGRICULTURE,  
BUREAU OF PLANT INDUSTRY,  
OFFICE OF FOREIGN SEED AND PLANT INTRODUCTION.

NO. 62.

BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

May 1 to 15, 1911.

NEW PLANT IMMIGRANTS.

(NOTE: Applications for material listed in this bulletin may be made at any time to this Office. As they are received they are filed and when the material is ready for the use of experimenters it is sent to those on the list of applicants who can show that they are prepared to care for it, as well as to others selected because of their special fitness to experiment with the particular plants imported.)

One of the main objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant experimenters, and it will undertake, so far as possible, to fill any specific requests for foreign seeds or plants from plant breeders and others interested.)

AMYGDALUS PERSICA. (Amygdalaceae.) 30482. Cuttings of the Feitcheng peach from about fifty miles southwest of Tsinan, Shantung, China. Presented by Mr. T. B. Neal, Union Medical College, Tsinan. "This bears the name and may quite likely be a strain of the peach found and described by Mr. Frank N. Meyer when in the Shantung Province (No. 21989). It is a late variety, coming into market about the middle of September or October. It is reported to have such unusual keeping qualities, that it can be kept, when wrapped in tissue paper, until February. Though a cling stone it is luscious, sweet and aromatic, and of unusual size, reaching a pound in weight and is so prized by the Chinese that as much as 15 cents apiece is paid for it in the region where it is grown; every year the Feitcheng peaches are sent as a present to the Imperial court in Peking." (Fairchild.)

ANACARDIUM RHINOCARPUS. (Anacardiaceae.) 30742. Seed from San José, Costa Rica. Presented by Mr. C. Wercklé, Department of Agriculture. This Costa Rican species of cashew is recommended by Mr. O. F. Cook for trial as a stock for the mango in Florida. For distribution later.

ANONA SP. (Anonaceae.) 30835. Seeds from Sacikela, Angola, West Africa. Presented by Mr. Merlin W. Ennis, Benguela, West Africa. "Seeds of a dwarf Anona. I think it is

one described by Welwitsch. The plant is about the size of the huckleberry and favors about the same sort of soil and location. The fruit is the size of a small apple and some have a decidedly pleasant taste. In its wild state the plant is killed down every year by the fires, so I think it could be grown anywhere in the south where the ground does not freeze." (Ennis.) For distribution later.

ASPARAGUS SP. (Convallariaceae.) 30953. Rhizomes from Tchoß, Tekes Valley, Thian Shan, Chinese Turkestan. Altitude 4300 feet. "A wild asparagus, of climbing habits, growing from eight to fifteen feet in length. Found between Berberis bushes. The young sprouts are eaten as a spring vegetable. Of value possibly as an ornamental plant in northern regions for several purposes; viz., as a bower plant, as living festoons of small dimensions, as a porch climber and as cut greens for decorative work." (Meyer's introduction.) For distribution later.

CERATONIA SILIQUA. (Caesalpinaceae.) 30914-919. Scions of the carob from Valencia, Spain. Received through Mr. Robert Frazer, Jr., American Consul. 30914. Matalafera. The variety now most extensively cultivated around Valencia, having deep chestnut colored fruit of large size and excellent appearance, but inferior to the red fruited varieties in weight and amount of pulp. The most constant and abundant cropper of the Valencia carobs. 30915. Casuda, the most appreciated of Valencia carobs, having long, wide and thick reddish chestnut colored fruit and abundant white pulp. Very uncertain cropper. 30916. Red flowered male. Smaller and more delicate than the next, but very floriferous. The flowers, however, frequently fall before fertilization is possible. 30917. Yellow flowered male. A vigorous tree, which when grafted on female stock requires frequent pruning to keep in check. 30918. Roya vera. A large tree, producing a steady, constant and abundant crop of light red fruits well scattered over the tree. It is preferred to No. 30915, although of poorer quality, because of its crop producing ability. 30919. The hermaphrodite carob. This tree with bi-sexual flowers produces fruit of such inferior quality that they are rejected by cattle accustomed to other carobs. It has the advantage of not requiring grafting and the fruits adhere so firmly to the tree as never to be swept off by high winds before maturity as often happens in the case of other carobs. The coarse fruit is usually exported and is soaked in sea water en route to increase palatability. (Notes abstracted from report of Mr. Frazer.) All for distribution later.

CITRUS SP. (Rutaceae.) 30737. Seeds of lemon from the Salvation Army Industrial Farm at Ani, Dalash P. O., via

Simla, India. Grown at an elevation of 4000 feet in the famous Kulu valley in the Himalayas. Presented by Mr. F. Booth Tucker, Simla, India. "The trees and fruit from which these seeds were taken are very fine. I may add that we have had a particularly severe winter with a considerable fall of snow in the valley. Our oranges and lemons were a good deal damaged by a hail storm, but not by the accompanying frost and snow." (Tucker.) For distribution later.

COLOCASIA SP. (Araceae.) 30743. Tubers of dasheen from Mukden, Manchuria. The region of production is not exactly known, but is said to be in the north part of Chili Province, China, at a latitude of approximately 40° North. Procured by Mr. Edward C. Parker, agriculturist, Bureau of Agriculture, Industry and Commerce. "Taro. Chinese name Yu to." "The tubers received were small and resembled those of the Japanese dasheens. They are mucilaginous and lacking in flavor when cooked. The tubers are nonacid even when raw." (R. A. Young.) For distribution later.

ELAEAGNUS ANGUSTIFOLIA. (Elaeagnaceae.) 30940. Cuttings of oleaster from near Yamatu, Thian Shan, Chinese Turkestan. Altitude of 2500 feet. "A variety of wild oleaster having a beautiful, shining, chocolate-brown bark. Found on a sandy waste along the Tekes River. Grows into a tall shrub or a small tree. Of decided ornamental value for parks and gardens in the cooler sections of the United States." (Meyer's introduction.) For distribution later.

ENTELEA ARBORESCENS. (Tiliaceae.) 30833-834. Seeds from Epsom, Auckland, New Zealand, presented by Mr. W. Petrie, and from Auckland, presented by Mr. E. Clifton, Director, Department of Agriculture, Commerce and Tourists. This tree has already been tried in California and has been found to be a very rapid grower. The wood is very light and it is hoped that its sawdust may become of great use as packing for grapes and other fruits, in place of the more expensive cork, and the heavier redwood sawdust. For distribution later.

GOSSYPIUM SP. (Malvaceae.) 30823. Seeds of cotton from Alexandria, Egypt. Presented by Mr. D. S. Fish, Secretary, Alexandria Horticultural Society. "Sakellaridis. This variety is of quite recent introduction and produces the best Egyptian cotton. The seed sent is said to have been saved from selected plants." (Fish.) For distribution later.

IPOMOEA BATATAS. (Convolvulaceae.) 30749. Tubers of a sweet potato from Auckland, New Zealand. Presented by Messrs. Arthur Yates and Co., Auckland. "The New Zealand

Kumara has been chiefly grown by our native race, the Maori, and consequently any varieties which may have been distinct in the first place have long since become crossed so that it is now impossible to obtain separate sorts. The tubers sent are of the Kumara which is known here as the New Zealand Red Skinned Kumara. This is a New Zealand variety which is in common use here." (Yates and Co.) For distribution later.

LONICERA SP. (Caprifoliaceae.) 30936. Cuttings of a honeysuckle from the valley of the Chong Djighilan, Thian Shan, Chinese Turkestan. Altitude of 3700 feet. "A shrubby honeysuckle; found in copses on peaty and on rocky soil. Growing 4 to 6 feet in height. Young branches are of a pale yellow or white color and are attractive looking in winter. Of use probably as a park and garden shrub in the northern United States." (Meyer's introduction.) For distribution later.

LONICERA SP. (Caprifoliaceae.) 30937. Cuttings of a honeysuckle from near Yengi-Malah, Thian Shan, Chinese Turkestan. Altitude of 8000 feet. "A shrubby honeysuckle, of tall, fastigiate growth. A mutation. The only one seen among thousands of normally growing bushes. Of value as a shrub of rigid outlines along pathways, also as a background for flowering plants in cemeteries and in gardens where a certain formal and dignified spirit has to be preserved." (Meyer's introduction.) For distribution later.

MALUS SPP. (Malaceae.) 30946-947. Cuttings of wild apples from the Thian Shan Mountains, Chinese Turkestan. 30946. From Kurgan. Altitude 7700 feet. "A wild apple growing into a small sized tree. Young branches of a very dark red color. This form stands apparently great drought and severe cold and may be of value in hybridization work to create hardier strains of apples, fit for the coldest sections of the United States. May also be tried as a dwarfing stock in cold sections." 30947. From near Kitchik Djighilan. Altitude 4100 feet. "A wild apple of somewhat bushy growth, found on the north slopes of otherwise barren mountains. Bearing small round apples, of red color and of subacid taste, having long peduncles; calyx persistent. At the time of visit (March 17) the trees were still standing in two feet of hard frozen snow and this fact, together with the decidedly semi-arid character of the locality, and the short, hot and dry summers, should make this species of apple a valuable one as a hybridization factor in the creation of hardier types of apples fit to thrive in the upper Mississippi Valley regions and the localities west of it." (Meyer's introductions.) For distribution later.

MALUS SPP. (Malaceae.) 30950-951. Cuttings of cultivated apples, from Aksu, Chinese Turkestan. 30950. "A variety of cultivated apple, called 'Kabak alma.' Said to be large, of oblong shape, of white color, and ripening in summer. The trees have a drooping, spreading habit and are said to bear abundantly only every other year. Of value possibly in those sections of the United States where the summers are hot and dry, but the winters moderately cold and where ordinary apples do not succeed." 30951. "A variety of cultivated apple, called 'kizlik alma.' Said to be a real good variety of winter apple. Shape oblong, medium size, colored red on one side and greenish white on the other. Ripens in November, of good keeping qualities and a prolific bearer. To be tested like No. 30950." (Meyer's introductions.) For distribution later.

MUSA SP. (Musaceae.) 30828. Suckers of a banana from Pirapo, Paraguay. Presented by Mr. C. F. Mead. "Paraguayan banana, botanical name unknown unless it is a sport from *Musa sapientum*. Grows to a height of 20 to 25 feet, very large and heavy leaves which ravel easily by wind making a dirty and unpopular banana plant. Fruit in very large bunches up to 100 pounds in weight and classed by many travelers as the finest flavored of all bananas, which is my experience also as compared to Hawaiian, Mexican, Central American and Brazilian bananas." (Mead.) For distribution later.

OLEA EUROPAEA. (Oleaceae.) 30741. Truncheons of olive from Sfax, Tunis. Purchased from Messrs. Chatel and Jacquemart, through Mr. T. H. Kearney. "Chemlali. This is an olive with very small fruit, very rich in oil, and a heavy yielder, adapted to the driest, hottest region known in which olive culture flourishes, the rainfall at Sfax, in southern Tunis, where it is the only variety grown extensively, averaging about ten inches yearly, and sometimes falling to five or six inches as the average for several successive years." (Kearney.) For distribution later.

PHORMIUM SPP. (Liliaceae.) 30831-832. Seeds of two species of New Zealand flax from Greendale, Canterbury, New Zealand. Presented by Mr. T. W. Adams. 30831. *Phormium tenax*. "Seeds of several varieties that I have growing here, several of which are ornamental, and all are good fiber sorts." 30832. *Phormium cookianum*. "This variety is ornamental in flower and fruit, but poor as a fiber plant." (Notes by Mr. Adams.) For distribution later.

POPULUS SP. (Salicaceae.) 30922. Cuttings of a poplar from Yengi-Malah, Thian Shan, Chinese Turkestan. Altitude 7950 feet. "A species of wild poplar, called 'tagh terek.'

Growing into a small or medium sized tree, occurring on stony, sterile and desolate places, mostly in the vicinity of mountain streams. Leaves somewhat leathery and varying considerably on different specimens. Bark glossy, grayish white, making a grove of these trees a cheerful object in an otherwise dull winter landscape. Recommended as an ornamental park tree, also as a fuel supply in cold and bleak regions. Suited especially to cool mountain climates." (Meyer's introduction.) For distribution later.

PRUNUS ARMENIACA. (Amygdalaceae.) 30952. Cuttings of apricot from near Kitchik Djighilan, Thian Shan, Chinese Turkestan. Altitude 4100 feet. "A variety of wild apricot, found between clumps of wild apples on the north side of a barren mountain, the trees standing in two feet of hard frozen snow at the time of visit (March 17). Recommended as of possible value to assist in the creation of a race of late blooming hardy apricots for the northern United States." (Meyer's introduction.) For distribution later.

PYRUS SP. (Malaceae.) Seeds of a pear from southern Russia. Presented by Mr. Theo. Kryshthofovitch, Russian Government Agricultural Commissioner, St. Louis, Missouri. "This, a tree of large size, is the most drought resistant of the pear family in my opinion. Its native place is about latitude 47° and longitude 37° and it is almost extinct. It should be tried as a stock for cultivated varieties of pears in dry countries." (Kryshthofovitch.) For distribution later.

RIBES SPP. (Grossulariaceae.) 30943-944. Cuttings of wild currants from near Idin-Kul, Thian Shan, Chinese Turkestan. Altitude 8200 feet. 30943. "A wild currant, found on rocky mountain slopes in the shade of spruce trees. Of value possibly in hybridization experiments." 30944. "A wild currant, found on rocky mountain slopes in the shade of spruce trees. Of very tall growth, 6 to 10 feet. Young shoots covered with prickles. Of possible value in hybridization experiments and also as a hardy ornamental park shrub." (Meyer's introductions.) For distribution later.

RIBES SP. (Grossulariaceae.) 30945. Cuttings of a gooseberry from the valley of the Chong Djighilan, Thian Shan, Chinese Turkestan. Altitude 3700 feet. "A rare species of wild gooseberry, found on shady places amidst various scrub. Young branches rather spiny. Of possible value in hybridization experiments, and as an ornamental shrub." (Meyer's introduction.) For distribution later.

RUBUS MACRAEI. (Rosaceae.) 30907. Cuttings of the Akala berry from Hawaii. Presented by Dr. E. V. Wilcox, Hawaiian Experiment Station, Honolulu. "The fruit attains a

diameter of nearly two inches, is dark-red, very juicy, and although slightly bitter, quite pleasant to the taste." (Hillebrand.) Would likely improve under cultivation. (Muel-ler.) For distribution later.

SALIX SPP. (Salicaceae.) 30923-929. Cuttings of willows from Thian Shan, Chinese Turkestan. These willows vary in size from small shrubs to small trees, all growing at high altitudes in the mountains. Mostly recommended as garden and park trees for the cooler portions of the United States. (Meyer's introductions.) For distribution later.

SPIRAEA SPP. (Rosaceae.) 30934-935. Cuttings of Spiraea from Thian Shan, Chinese Turkestan. 30934. "A shrubby Spi-raea, occurring on dry plains in rather heavy soils. Growing from three to five feet tall, bearing apparently white flow-ers. Of possible value as a park and garden shrub in the northern sections of the United States." 30935. "A Spiraea, found on rocky mountain sides, growing from three to five feet in height, having tomentose branches. Of value probably like the preceding." (Meyer's introductions.) For distribu-tion later.

TAMARIX SPP. (Tamaricaceae.) 30930-933. Cuttings of tamarisks from Chinese Turkestan. Among these are some recommended as sand-binders, others as broom and basket material, and several of probable value as ornamental shrubs. (Meyer's introductions.) For distribution later.

ULMUS SP. (Ulmaceae.) 30941. Cuttings of an elm from Aksu, Chinese Turkestan. "A cultivated variety of elm, called 'Seda' forming a very dense well-rounded head. Growing to a great age and becoming through its dense black mass of branches a feature of the Turkestan landscape. Recommended as a peculiar formal shade tree for cemeteries, also as an ornamental tree of stiff outlines in front of buildings of classical designs." (Meyer's introduction.) For distribu-tion later.

VITIS VINIFERA. (Vitaceae.) 30825-827. Cuttings of three varieties of table grapes from Tiflis, Caucasus, Russia. Presented by Mr. A. Rolloff, Botanic Garden. 30825. Mskhali. A dessert variety. Does well in alkaline soils. Ripens from the first to the fifteenth of September. 30826. Bandi. Fruitful dessert variety. May be kept until Easter. 30827. Schafei. Ripens at the beginning of October. Can be kept for six months. Does not suffer from Oidium. All for distribution later.

## NOTES FROM FOREIGN CORRESPONDENTS.

CHINESE TURKESTAN. Kuldja. Among the notes sent in by Mr. Frank N. Meyer, Agricultural Explorer, on material collected in the Thian Shan Mountains, the following were appended to certain cuttings of wild apple which did not survive the journey. "The valley of the Chong Djighilan River (altitude 3700 feet) and its small tributaries is one vast wild apple and apricot garden, and these wild trees vary in all possible ways. The quality and sizes of the fruits of the wild apples exhibit great variations, ranging from small, sour, hard fruits up to medium sized apples of a very fair taste. The local people collect the best varieties in autumn, slice them and keep them dried for winter use, while bears and wild hogs come down from the higher mountains especially to enjoy both the apples and the apricots in late summer and autumn. These wild apples are apparently much slower growers than those we have in cultivation, but they make up for it in all round hardiness and one may expect to obtain from them strains able to stand much greater cold than most of the varieties that have been developed from the apples coming originally from moist and mild western Europe."

GERMAN EAST AFRICA. Amani. Dr. A. Zimmermann writes April 26 that he is sending us seed of *Sphenostylis stenocarpa*, a tuberous rooted legume, cultivated and eaten by the natives at Tabora. Seeds of *Dolichos pseudopachyrhizus* have not yet come to hand to send us.

MAURITIUS. Port Louis. Mr. G. Regnard writes April 15, that because of the severe cyclones from which the island has suffered this spring, he will not be able to send us the grafted mangos until next year. He will undertake to get for us seed of the Bay tree, *Pimenta acris*, from which bay rum is made.

NEW SOUTH WALES. Burringbar. Mr. B. Harrison offers to secure for us seeds of the native *Carissa Brownii* which we wish for breeding purposes, and of the native Mangosteen, *Garcinia Mestoni*, which is a semitropical fruit of good quality. He describes certain native trees, the *Melaleuca* or ti-tree, having "a covering of many sheets or layers of bark, which are used for roofing houses and sheds. The timber is durable, the bloom is profuse and contains a large amount of honey, and a volatile oil resembling *Eucalyptus* can be distilled from the foliage. The brown pine is another timber suitable for piles and resists the *teredo navalis*, or marine worm, and bears a plum like fruit, which makes a good preserve."





### STRYCHNOS SPINOSA.

Natural size photograph of the first fruits produced in America of Plant Introduction No. 9611. The seeds were secured by Messrs. Lathrop and Fairchild at Lourenço Marquez, Portuguese East Africa, in February, 1903, and a tree grown at Miami, Florida, fruited for the first time in April 1911. This is an extremely interesting new subtropical fruit. It is perfectly round like a cannon ball, and has a shell so hard that it has to be cracked with a hammer. This specimen was picked green, sent to Washington and kept for three weeks in my office. While green it has no aroma, but as it ripens it becomes so aromatic that it scents the room with the odor of cloves. The seeds are supposed to be poisonous, since the plant belongs to the same genus as that from which strychnine is obtained, but an examination showed scarcely a trace of this poison in those contained in this fruit. The pulp is about the consistency of a very ripe banana and reminds one of it in flavor, though it has in addition a distinct and pleasing flavor of cloves. When it is considered that this is still a wild fruit and that there are other edible relatives, it becomes worthy of the attention of subtropical plant breeders. (Fairchild.)



AMYGDALUS PERSICA. FEITCHENG PEACH.

Photograph of an orchard of the famous Fei or Feitcheng Peach taken by Mr. Frank N. Meyer at Feitcheng, Shantung, China, September 1, 1907. Scions were collected by Mr. Meyer from the trees in this orchard, but owing to the long voyage to America they arrived dead. From seeds secured, however, a plant is now growing in the Chico Gardens (see photograph on next sheet) and a large number of budded plants will be ready for distribution to experimenters when this seedling has fruited and shown its value.



AMYGDALUS PERSICA. FEITCHENG PEACH.

Photograph of a single plant of the Feitcheng peach, from seeds imported as Plant Introduction No. 21989, from the orchard shown in preceding photograph. This tree flowered for the first time this year at the Plant Introduction Garden, Chico, California, and it is hoped that by next season the value of this seedling may be determined. Photographed July 1, 1910.